## **ABSTRACT**

A microwave or radio frequency device including an applicator for receiving an object to be processed, and a plurality of generators supplying power to the applicator via propagation guides. According to the invention, three propagation guides propagating the microwaves or radio frequencies generated by three respective generators are mounted on three respective plates defining a three-dimensional rectangular axis system, and symmetrical relative to a ternary axis of symmetry of the axis system, whereby the generators supplying power to the applicator are mutually decoupled. The three propagation guides have a rectangular cross-section and are mounted on respective plates in such a way that the short sides of the rectangular cross-section of said guides are orthogonal in pairs, or are coaxial cables extending in a longitudinal propagation direction perpendicular to the plates with one exposed end thereof extending into the applicator. The position of the propagation guides is variable depending on rotation thereof about the longitudinal propagation direction, and translation in a direction parallel to the plates on which they are mounted.